

REMARKS

Claims 1-9 are pending in this application. The Examiner has acknowledged that claims 7 and 8 are directed to allowable subject matter. Accordingly, claim 7 has been rewritten in independent form, including all of the limitations of the base claim. Claim 1 adds an additional feature from the specification.

Claims 1 and 2 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bock et al. (U.S. Patent No. 6,417,868). Claims 3, 4-6, 9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bock in view of Borel et al. (U.S. Patent No. 6,252,613). Feldman (U.S. Patent No. 6,121,961) and Uno et al. (U.S. Patent No. 5,748,276) were also cited by the examiner as being pertinent. It is respectfully submitted that claims 1-6, 9 are not obvious in view of the cited references.

Bock acknowledges the prior art solution of achieving gray scale by dividing a pixel into a number of sub-pixels and then adjusting the average luminescence of the pixel to set the gray level by illuminating only a fraction of the sub-pixels. Because the sub-pixels are of the same size, the number of possible gray levels is only equal to the number of sub-pixels plus one. Bock overcomes this problem by making the sub-pixels 41-49 different sizes. (See Col. 4, Lines 5-19 and FIG. 3). However, Bock teaches that the pixels always consist of the same time-invariant set of sub-pixels.

On the other hand, the present invention, as defined in amended claim 1, includes “selecting distinct sets of a fixed number of said sub-pixels forming said pixel from a super set of said sub-pixels surrounding said pixel for each of a set of sub-frames within a frame of said video data, wherein each of said distinct sets contains different sub-pixels.” Because these selected sets are “distinct” from one another, in that each set does not contain the same sub-pixels, such a feature

distinguishes the present invention from Bock. As a result of using "distinct sets of sub-pixels," a different center location is provided for the pixels that make up the different sub-frames. Thus, a coarse spatial resolution of the display is determined by the spacing between the centers of the large sets of sub-pixels from which sub-pixels for a pixel are selected, and within the claimed "superset," a higher resolution is defined by the variable center location of the sub-frame pixels.

Borel teaches a solution to improving the vertical resolution of a display without degrading the horizontal resolution. However, Borel does not teach the selection of "distinct sets . . . from a superset of sub-pixels . . .," as recited in claim 1. Thus, Borel fails to overcome the deficiencies of Bock.

In view of the foregoing, it is respectfully submitted that all claims (1-9) are distinguished over the prior art and that the application is now in condition for allowance. An early notice to that effect is earnestly solicited.

Respectfully submitted,

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